

25X1A

Technical Report No.

A SURVEY OF LITERATURE INTELLIGENCE
(LITINT) RESOURCES AND
OPERATIONS

by

15 February 1978

SECRET

SECRET

25X1

Log Number 37

Copy Number 01

PRELIMINARY DRAFT

Technical Report No.

25X1A

A SURVEY OF LITERATURE INTELLIGENCE
(LITINT) RESOURCES AND
OPERATIONS

25X1

by

25X1A

15 February 1978

Prepared for

The Director of Central Intelligence
Washington, D.C. 20505

under

Contract No.

25X1A

25X1

NATIONAL SECURITY AGENCY
Unauthorized Disclosure Prohibited
Classification

SECRET

25X1

UNCLASSIFIED

A SURVEY OF LITERATURE INTELLIGENCE (LITINT) RESOURCES AND OPERATIONS (U)

ABSTRACT

25X1

25X1A

1. [] This document is the final report on a study performed [] for the Director of Central Intelligence []. The main objective of the study was to undertake a preliminary survey and assessment of the existing, community-wide activities, that are engaged in the exploitation of foreign language sources in support of, or supplementary to, intelligence production.

25X1A

25X1

2. [] Exploitation of foreign literature for intelligence (hereafter, LITINT) developed as a distinct source of intelligence in an *ad hoc* fashion; it evolved in response to a series of manifest needs or as a means of responding to a "target of opportunity." In most countries (and particularly in the Soviet Union) LITINT is exploited as a discrete intelligence source, but in the United States it is: (a) a support activity, and LITINT resources are fragmented and diffused; (b) insufficiently exploited and relegated to a translation service; and (c) unappreciated, since there is wide spread lack of awareness of LITINT utility, potential, and even existence.

25X1

3. [] The most *unique value* of LITINT to the intelligence community is its potential role as a bridge between the intelligence establishment and the nation at large. Using a scholarly approach to unclassified LITINT sources, it is possible to produce a sanitized intelligence product of high credibility and worth. Passed on to the general public, news media, and academia, this product would enhance the understanding of the problems facing the intelligence community. This, in turn, would enhance the image of the intelligence establishment and its acceptance by the American people.

25X1

4. [] The report presents the findings of a two-man-month study to:

- Identify major community-wide LITINT activities
- Assess their strengths and weaknesses
- Explore the ways to improve LITINT's contribution to the production of all-source national intelligence.

UNCLASSIFIED

CONFIDENTIAL

A SURVEY OF LITERATURE INTELLIGENCE (LITINT) RESOURCES AND OPERATIONS [REDACTED]

25X1

EXECUTIVE SUMMARY

BACKGROUND

25X1 1. [REDACTED] This report presents major findings emerging from a preliminary study of community-wide resources engaged in the *exploitation of foreign-language literature for intelligence* (hereafter LITINT). The objectives of the study were to: (a) identify and survey LITINT activities, (b) assess their strengths and weaknesses, and (c) explore the ways and means of improving LITINT support to the production of all-source intelligence.

WHAT IS LITINT?

25X1 2. [REDACTED] LITINT is largely an *overt* intelligence process, based on exploitation of foreign open and classified published sources; as an intelligence process it is comprised of the traditional intelligence functions of: *collection, analysis/production and dissemination*. A supportive function unique to LITINT is *translation* of foreign texts for analysis and for other users.

Utility of LITINT

25X1 3. [REDACTED] The maximum utility of LITINT is realized if it is treated as a *discrete intelligence source* (like HUMINT, COMINT, and ELINT). Properly exploited, using specialized LITINT analytical techniques, and properly coordinated and directed, a well-functioning LITINT support program can: (a) improve the quality of the national product, (b) augment and extend the coverage of an intelligence target, and (c) provide intelligence information not available from any other source.

Unique Value of LITINT

25X1 4. [REDACTED] LITINT is largely an *overt* intelligence process based on the exploitation of *mostly unclassified* authoritative and scholarly foreign-language literature. *It can be used as a bridge of understanding between the intelligence community and the nation at large*. Using a scholarly approach to unclassified sources, it is possible to produce a *carefully sanitized* intelligence product of high credibility and worth. This product can be made available

CONFIDENTIAL

CONFIDENTIAL

to the general public, news media, and academia. The selected topics would enhance the understanding of the problems facing the intelligence community. This, in turn, would improve the image of the intelligence establishment and its acceptance by the American people. No other intelligence source could serve this purpose as effectively as LITINT.

SUMMARY OF MAJOR FINDINGS

Identification and Survey of LITINT Activities

25X1 5. [] LITINT activities were found to be a diffuse and un-coordinated functional support system to intelligence production in various agencies of the intelligence community. Identified LITINT resources are comprised of 57 governmental activities, which are supported by approximately 750 contractor/translators and an unknown number of contractor/analysts. With proper coordination, some redirection of activities, and elimination of wasteful practices LITINT activities can become more efficient and cost-effective.

Assessment of LITINT Efficacy

25X1 6. [] The conclusion, which emerged from the study, is that existing LITINT resources are underexploited to the detriment of the intelligence community and the quality of the national intelligence product. This is due to: (a) the insufficient utilization of LITINT as a discrete intelligence source, (b) the under-exploitation of the existing LITINT product, and (c) the existence of wasteful practices and uses.

Areas of Possible Improvement

25X1 7. [] Possible improvements in community-wide LITINT support fall into three general areas:

- Resolution of pressing problems (e.g., producer/user interface, machine *versus* human and machine-aided translation, "raw data" or "data reduction" emphasis). Near-term resolution of these and similar problems would: (a) reduce expenditures (in some areas of coverage as much as 40-50%), and (b) improve the quality of LITINT support to production of finished all-source intelligence.

CONFIDENTIAL

CONFIDENTIAL

- Exploitation of LITINT resources to keep the nation at large informed of intelligence problems and to enhance public acceptance of the intelligence establishment and its tasks.
- Gradual transformation of the now-fragmented LITINT resources into a more closely coordinated LITINT source of intelligence.

Bottom Line

25X1 8. [] Because LITINT is a valuable asset of the intelligence community, and because it is underexploited to the detriment of the national intelligence product, it is urgent that we *centralize the coordination of LITINT resources* in order to: (a) resolve pressing problems, (b) initiate exploitation of LITINT to gain understanding and support from the public, and (c) initiate steps toward gradual transformation of fragmented LITINT resources into a more effective community-wide support program.

25X1 9. [] A more detailed discussion of major findings is presented in Section 1, "Summary of the Report" (white pages).

CONFIDENTIAL

UNCLASSIFIED

TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	i
EXECUTIVE SUMMARY	ii
LIST OF TABLES	vi
1. SUMMARY OF THE REPORT	1
Background; Major Findings; Community- Wide LITINT Resources; Strengths and Weaknesses of LITINT; Possible Areas of Improvement; Conclusion.	
2. COMMUNITY-WIDE LITINT RESOURCES	9
The Problem; The Approach; Identified Activities; LITINT System; LITINT Oper- ations.	
3. STRENGTHS AND WEAKNESSES OF LITINT RESOURCES	14
Background; U.S. LITINT Compared to Soviet Efforts; Strengths of the U.S. LITINT Resources; Weaknesses in Exist- ing LITINT Resources.	
4. POSSIBLE AREAS OF IMPROVEMENT	25
The Three General Areas of Improvement; Resolution of Pressing Problems; Machine Versus Human or Machine-Aided Translation; Other Pressing Problems; Coordination of LITINT; Improving the Image of the Intel- ligence Establishment.	
5. CONCLUSION	36
General Conclusion; Where to Begin?	
APPENDIX A: LITINT COMMUNITY-WIDE RESOURCES	39
APPENDIX B: SOVIET ARTICLES ON INFORMATION SUPPORT AND LITINT TO RDT&E	46

UNCLASSIFIED

UNCLASSIFIED

LIST OF TABLES

	<u>Page</u>
2-1. National Literature Intelligence (LITINT) Resources and Organizations	11
3-1. FBIS Publications Monitoring of Highest Priority Countries	16
3-2. Tentative Conclusions From Comparison of Soviet and U.S. LITINT Efforts	19
A-1. A List of LITINT Resources and Activities	39

UNCLASSIFIED

Next 46 Page(s) In Document Exempt

UNCLASSIFIED

The State System of Science Information

Behind a Decision of the 24th C.P.S.U. Congress: **WHY DOES INFORMATION 'WORK'?** (By M. Korolev. Pravda, 1971, p. 3. 1,500 words. Condensed text:) 1. ... A new kind of "industrial" branch has appeared in the country — the state system of scientific and technical information. It plays an enormous role in accelerating scientific and technological progress and, on this basis, improving the efficiency of the national economy. What constitutes this system? What progress has it made during the Ninth Five-Year Plan? To what extent has "knowledge turnover" been accelerated? In the present, the state system of scientific and technical information is made up of 10 all-Union, 88 central branch and 1,000 scientific institutes, 89 interbranch territorial centers and 1,000 scientific and technical information departments in enterprises and in institutes and design bureaus. There are more than 1,500 scientific and technical libraries in the country on the functions of information departments (but these subdivisions have not been set up as yet). The total number of regular personnel is 155,000. Approximately 5,000,000 scientists and specialists make direct use of their services. The nationwide reference-and-information service contains about 1,500,000,000 documents: reports on research results, descriptions of inventions, dissertations, catalogues of equipment and manufactured articles, deposited manuscripts, translations of foreign literature, normative-technical documentation, etc. Its shelves are filled with printed volumes, magnetic tapes and disks, xeroxed copies, microcopies and microfiches — in a great variety of forms. The creations of human daring have been collected in hundreds of repositories.

The enormous volume of the system's work can be judged from the following examples. In preparing its "Journal of Abstracts," the All-Union Institute of Scientific and Technical Information — the world's largest information and research center — annually processes over 1,500,000 articles from tens of thousands of publications issued in 86 languages in 131 countries. In response to requests, the institute distributes over 5,500,000 xeroxed copies, photocopies and microfilms every year. The All-Union Scientific and Technical Information Center offers its clients approximately 500,000 microfilmed reports on research and development projects and dissertations.

However, this kind of once-over-lightly statistical portrait does not answer the questions: Are these large or small numbers? Ought we to rejoice at these impressive figures? A comparison with analogous data for the beginning of 1971 shows that sheer quantitative growth has by no means been the main feature of the system during the Ninth Five-Year Plan. True, it has been enlarged by the addition of the All-Union Center for the Translation of Scientific and Technical Literature and Documentation, while the number of branch information centers has increased by four and the number of interbranch territorial centers by 21. But the number of regular staff members has grown at an appreciably lower rate than in the recent past. The increase in the volume of information publications (16,000 printer's signatures) has been negligible, while the number of publishing organizations has even decreased (from 180 in 1970 to 100 in 1974).

The new frontiers the service has reached were gained not only, and not even mainly, by "bigger numbers." During these years, its reference-and-information bank has increased by 50%. The mandatory state registration of and keeping of records on experimental-design work began (data on research projects and their results had been fed into the system's "memory" earlier as well). A few years ago the "information x-ray" examined only the vast areas of the natural and technical sciences. With the organization of the Institute of Scientific Information in the Social Sciences, it has been extended to this area as well.

Still another element of paramount importance has appeared — the system of informing enterprises and organizations about the scientific and technical achievements and advanced production experience of other branches. Its headquarters — the young All-Union Institute of Interbranch Information — will have to increase the effectiveness of its efforts considerably, but the basis for interdepartmental exchanges has been laid.

At the start of development work on any innovation, the specialist must have a thorough knowledge of the standards and technical specifications pertaining to the given field — a kind of buoy marking the proper channel of search. Here the normative-technical documentation bank comes to his aid. It now contains over 300,000 documents, and — this is very important — its riches have become far more accessible to users: Branches have appeared in the republic centers and in a number of interbranch territorial centers.

To avoid incorporating obsolete equipment in designs, designers must have some idea of what types of equipment and manufactured articles are being produced and where. The central collection of equipment catalogues in the U.S.S.R. State Public Scientific and Technical Library has grown by approximately 600,000 in the past few years; the total has reached 1,000,000 units. The formation of territorial catalogue collections has begun. They have been set up in a number of economic regions of the Russian Republic, in the Ukraine and in the Baltic republics. A good indication of the demand for their services is provided by the following figure — the reading room of the main scientific and technical library alone issues more than 4,500,000 catalogues to readers each year.

The service has taken under its wings the methodological guidance of translations of foreign scientific and technical literature and documentation and the coordination of this work. The total page count of translated literature has nearly tripled since 1971. The time periods for filling orders have been cut in half, though efficiency is still inadequate here. The mandatory registration of translations done in the country has begun.

The International Scientific and Technical Information Center, which the C.M.E.A. member-countries established in Moscow earlier, has become part of the "services system." Thus, the cornerstone has been laid for the future international system of scientific and technical information that specialists in the fraternal socialist states are now planning.

These are the basic "structural advances." In essence, they boil down to the fact that the state system of scientific and technical information has widened the range of its possibilities and duties and is now introducing new types of information services and increasing the efficiency of its work. This has become possible because, among other things, its subdivisions are increasingly relying on advanced equipment. The wide-scale use of computers, communications channels and reproducing and copying devices are the main areas of technical progress in the "information service." ...

More than 30 automated systems were on display at the recent Exhibition of Scientific and Technical Information in the U.S.S.R. ...

At present, the services of the state system of scientific and technical information are directly used by approximately 25% more specialists than were using them at the end of the Eighth Five-Year Plan. Efficiency in the preparation of periodical information publications has increased: Over 80% of them now appear from 12 to 52 times a year. The publication of urgently needed information has increased by roughly one-third. All due respect must be paid to this achievement: The accelerated "turnover rate" of knowledge in conditions of intensifying scientific and technical competition in the world arena is a factor of paramount importance. The progressive method of the selective dissemination of information serves

UNCLASSIFIED

about 350,000 scientists, engineers and technicians (an increase of more than 100% in comparison with 1970). This means that more and more information is not being distributed wholesale but is addressed to specific clients.

An unquestionable achievement of the past few years is the beginning of the centralized dissemination of information publications. Over 600 of them, in total printings of about 1,500,000 copies, are distributed by subscription through the Chief Administration for the Distribution of Publications. Centralizing the delivery of all the service's publications to subscribers has been set as a task to be carried out in the next two to three years.

It is evident from even a cursory listing that the state system of scientific and technical information has important achievements on its record. We must talk about them at full length, and not only so that what has been accomplished can be properly assessed. It is also important that people working in research and production collectives, in the sphere of state administration and in local areas have a good knowledge of what the system's various subdivisions can offer and make use of their assistance.

An analysis of the responses to the materials Pravda has published on scientific and technical innovations indicates that the state of affairs has not yet reached this point. ...

Why do specialists and institutes frequently derive information they need on new developments from newspapers and popular magazines? Why do they go for consultations to the editorial offices and not to the scientific and technical information centers? There are a good many reasons for this, and they will be discussed in a subsequent article.

Why Behind a Decision of the 24th C.P.S.U. Congress: HOW DOES INFORMATION 'WORK'? (By M. Korolev. Pravda, Sept. 12, p. 3. 1,500 words. Condensed text): 2. ... More than 12,000 design bureaus, enterprises and organizations perform experimental-design work in our country, but at the end of last year only 560 of them, i.e., about 3%, were registered with the All-Union Scientific and Technical Information Center. It seems that the state registration of experimental-design work, which became mandatory as of Jan. 1, 1973, is really some sort of law that does not apply to everyone. Organizations and enterprises of the U.S.S.R. Ministry of Public Health and the Union Ministries of Higher Education and of Agriculture and scientific institutions of the U.S.S.R. Academy of Sciences have not bothered much about registering their research projects. Needless to say, the collective of the center itself is largely to blame for this — it ought to be more efficient. But it is also time that the ministries and departments began to hold the organizations under their jurisdiction responsible for this deficiency.

On take translations — one must know which foreign works have been translated in our country and where the original texts are kept. For this reason, all completed translations are subject to mandatory registration. But organizations of the Ministries of the Coal Industry, of the Machine Tool and Tool Industry, of Agriculture and of several other ministries are in no hurry to register them. Is it any wonder that the same materials are translated over and over again? An automated bank of data on scientific and technical translations is being set up now. This is a good thing! But without discipline it will lose its meaning.

Another important information sector is the standards reference data service. Its purpose is to allow any designer quickly to determine the precise characteristics of substances and materials of interest to him, especially new ones: their heat resistance, wear resistance, etc. As yet, only a few scientific information centers can help designers in this respect: on molecular spectroscopy, the one in the Siberian Division of the U.S.S.R. Academy of Sciences; on the thermophysical properties of pure substances, the one under the U.S.S.R. Academy of Sciences' Institute of High Temperatures; etc. But there is no well-organized network of centers of this kind. The decisive role in organizing such a network belongs to the U.S.S.R. State Committee on Standards, Mea-

sures and Measuring Instruments, but the committee has been slow in accomplishing this task. To this day, not even a working program for organizing the standards reference data service has been confirmed.

What about the system of interbranch exchanges of scientific and technical achievements? Behind the thousands of innovations that, according to the information bulletins, are introduced every year, one cannot help seeing that in a number of branches the selection of innovations suited to "neighboring" branches is superficial and fortuitous. Little attention is paid to the evaluation of, the keeping of records on or supervision over mutual transfers of scientific and technical achievements and their utilization, and the assembling of complete groups of documents earmarked for this purpose is usually given a very low priority.

However, let us assume that the "information bins" that are empty today will be filled tomorrow. Will the clients be satisfied with everything then? The executives of the subdivisions of the state system of scientific and technical information themselves emphasize that the answer is no: They will have to move on to their next work horizon and shift quickly to the production of new output.

What is the background of this situation? Until recently, the information agencies thought that their only duty was to gather documentation and pass it on to their clients. The interpretation and critical evaluation of the documentation was left to the clients. Now the agencies' goals have been formulated as follows: drastically to expand analyses of available data and to accompany publications with recommendatory information in the form of analytical (critical) reviews, systematized bulletins of prepublication information, cumulative bibliographic indexes and reference books, surveys of scientific and technical proposals, etc. This is a step toward significantly intensifying the influence that the state system of scientific and technical information exerts on the branches' scientific and technical progress and its participation in the preparation of plans for the development of the national economy.

Now yet another mountain gradually appears on the horizon. Whereas the system is now oriented toward familiarization with research results that have already been obtained, in the foreseeable future it will have to organize systematic information on the long-range plans of research institutes and design bureaus, schedules for the completion of various projects and the production of initial industrial series, the basic parameters of devices that are being designed, etc.

The distance between "we report" and "we recommend" is a considerable one, and it is not easy to bridge it. It is necessary rapidly to improve the qualifications of cadres. Not all of the personnel now working in the state system of scientific and technical information are able to give sound advice: Only half of its staff members have had a higher education, and in the interbranch territorial agencies the figure is a mere 30%.

Furthermore, these qualitatively new tasks call for appropriate technical equipment. Despite noticeable improvements in the past few years, the processing and issuance of data in most of the system's institutes and centers is done manually; only 26 of them have their own computers, while another 37 rent them. This means that as of now two-thirds of the subdivisions are "cut off" from electronic computer equipment. The available copying devices can satisfy roughly one-tenth of the requests for their use. There is only one microfilming installation for every two centers, and there are practically none for the preparation of microfiches. Moreover, the quality of the equipment leaves much to be desired. It is no accident that, despite the critical need for more copying devices, the plan for their production has been cut by roughly one-third — no one orders them. All these needs await close examination by the U.S.S.R. State Planning Committee and the ministries and departments.

Only general, concerned participation can bridge the noticeably widening gap between the level of the centralized provision of information and the state of information processing in local areas. At present, this is undoubtedly the service's Achilles heel. The network of primary units of the

43
UNCLASSIFIED

UNCLASSIFIED

state system of scientific and technical information at enterprises and in organizations by no means corresponds to the number of major enterprises and design organizations. As a result, the service "mills" a considerable part of its harvest to no purpose, doing it only for itself; this process is rooted in the fact that the staff members who are responsible for scientific and technical information at plants and construction sites and on state farms are treated as administrative-managerial personnel and are the first to go when staffs are reduced. Evidently some organizations are not aware that today's "uninformed" enterprise may become tomorrow's laggard.

Finally, there is another reserve that should be brought into play by the state system of scientific and technical infor-

mation itself: Its institutes and centers do too little to advertise themselves, and what they do is not very skillful. What is needed here is not boasting but the well-organized, systematic publicizing of services. Why, for instance, is the All-Union Research Institute on Technical Information, Classification and Coding overloaded with requests for normative-technical documents (up to 1,200 a day)? The reason is, among other things, that the enterprises and institutes do not know that it is possible to obtain these documents from the nearest territorial center. But how, one asks, can they learn about them if the system's subdivisions stint on the manpower and money needed to inform their clients about the services they offer? It is time to organize this work on an up-to-date basis and on a large scale. ...

UNCLASSIFIED

25X1

Approved For Release 2004/11/04 : CIA-RDP90-00509R000100010001-5

Approved For Release 2004/11/04 : CIA-RDP90-00509R000100010001-5